

Evidence based pediatrics

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It is very difficult to define the entire phrase “Evidence based pediatrics”, covering all components of this overused sentence. The definition comes out of the common sentence and it means integration of the individual clinical expertise together with the best external clinically available evidence of the systematic reviews which are of interest and benefit of the individual patient.

The characteristics of an ideal source of information are: validity (contains high quality data), relevance (clinically applicable), comprehensiveness (data on all benefits and harms of all possible intervention), and being user-friendly (quick and easy access).

Five essential steps of EBM practice are: Step 1: converting information needs into an answerable question; Step 2: finding the best evidence to answer the question; Step 3: critically appraising the evidence for its validity and usefulness; Step 4: applying the results of the appraisal into clinical practice and Step 5: evaluating clinical performance.

Development of clinically appropriate structured question follows PICO model, i.e. containing following components: P=patients; I=intervention; C=comparison (standard treatment, placebo, nothing) and O=outcome. For each type of questions *a systematic review* of all available studies is better than any individual study. The search could be performed using Boolean operators (A or B, A and B, A not B). The rationale for using systematic reviews is minimizing bias (of the reviewer, and in the research studies themselves), enhancement of the precision by including all the relevant evidence; putting results into context by examining conflicts and understanding differences; helping in prioritizing the research by knowing exactly what has been done, how well, and with what findings. Part of the systematic review is the metaanalysis, which represents statistical analysis of a large collection of results from individual studies for the purpose of integrating the findings.